

WHAT IS CLAIMED IS:

1. A method for facilitating configuration of one of a plurality of different products from a set of components which can be selectively combined in different ways to form a plurality of different component combinations that each serve as a respective said product, comprising the steps of:

5 determining whether each said component in said set corresponds to a first component class involving components that are required in each said product without variation in quantity and type;

10 determining whether each said component in said set corresponds to a second component class involving components that are required in each said product but that vary among said products with respect to at least one of quantity and type;

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determining whether each said component in said set corresponds to a third component class involving components that are each present in some but not all of said products, the components corresponding to said second and third component classes collectively forming a component group;

20 identifying a criteria set having a plurality of different states which each correspond to a respective one of said products; and

25 associating with each said state of said criteria set a definition of a combination of the components from said component group which is present in the corresponding product.

2. A method according to Claim 1, wherein said products each have therein one of a plurality of different combinations of the components corresponding to said second component class; and wherein said identifying step includes  
5 the steps of:

identifying a criteria subset which is a subset of said criteria set and which has a plurality of different states, each of said products being associated with one of said states of said criteria subset; and

10 associating with each of said states of said initial criteria set a definition of a respective one of said different combinations of components corresponding to said second component class.

15 *DK* 3. A method according to Claim 1, including the step of configuring said components so that at least one of said components in said component group is available in a plurality of different types.

20 4. A method according to Claim 1, including the steps of:

determining whether each said component in said set corresponds to an ancillary component class involving components that are separate from but related to at least  
25 some of said products, said component; and

including in said component group said components corresponding to said ancillary class.

5. A method according to Claim 1, wherein said identifying step includes the step of identifying a set of questions which correspond to said criteria in said criteria set and which have different combinations of 5 possible answers, each said state of said criteria set corresponding to a respective said combination of answers to said questions.

10. 6. A method according to Claim 5, including the step of presenting questions from said set of questions to a person, accepting from the person an answer to each question, and configuring a product based on said answers accepted from the person.

15. 7. A method according to Claim 1, wherein each of said products is a telecommunications product having transport interfaces and tributary interfaces, and wherein said identifying step includes the step of including within said criteria set at least one of a network element type, a speed for said transport interfaces, whether said transport interfaces are to be protected, a reach of said transport interfaces, whether ATM interface capability is to be present, a speed for said tributary interfaces, a quantity of said tributary interfaces, whether said 20 tributary interfaces are to be protected, and a reach of said tributary interfaces.

25. 8. A method according to Claim 1, wherein said determining steps are carried out in a manner so that, in each of said products, the number of said components 30 therein identified as corresponding to at least one of said first and second component classes cumulatively represent at least 40% of the total number of said components therein.

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9. A method according to Claim 1, including the steps

of:

determining whether each of said products meets a condition, said condition being that the number of said components therein identified as corresponding to at least one of said first and second component classes cumulatively represent at least 40% of the total number of said components therein; and

10 responding to a determination that one of said products does not meet said condition by effecting an adjustment which causes one of said components determined to correspond to said third component class to be treated as corresponding to said second component class rather than said third component class.

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20 *gl* 10. A method according to Claim 1, including prior to said determining steps the step of generating for each said component respective component information which includes an identification of all types of the component and includes configuration information defining the conditions under which a particular type and quantity of that component are used in each of said products.

25 11. A method according to Claim 10, wherein said step of generating said component information includes the step of taking engineering limitations into account in preparing said configuration information.

30 12. A method according to Claim 1, including after said determining, identifying and associating steps the step of preparing a flowchart which graphically represents a mapping between said different states of said criteria set and said definitions of combinations of the components from said component group.

13. A method according to Claim 1, including the step of configuring one of said components which corresponds to said first component class so that it can removably receive therein a plurality of other said components.